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IS 10222 (1982): Code of practice for the packaging of  
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IS : 10222 -1982

*Indian Standard*

CODE OF PRACTICE FOR  
THE PACKAGING OF NAILS

UDC 621.886.2 : 621.798 : 006.76



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**INDIAN STANDARDS INSTITUTION**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

# Indian Standard

## CODE OF PRACTICE FOR THE PACKAGING OF NAILS

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\*Capt N. A. Tamhane was the Chairman for the meeting in which this standard was finalized.

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## *Indian Standard*

### CODE OF PRACTICE FOR THE PACKAGING OF NAILS

#### 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 30 July 1982, after the draft finalized by the Packaging of Engineering Goods Sectional Committee had been approved by the Marine, Cargo Movement and Packaging Division Council.

**0.2** Nails are the important hardware items used as fastening accessories and packaging is required for their protection against transportation, handling and storage hazards. Packaging is also designed to ensure their availability in packs. This code has, therefore, been prepared to provide guidance to all concerned in the packaging, forwarding and transportation of nails.

**0.3** This code applies to the following Indian Standards on nails:

IS : 723-1972 Steel countersunk head wire nails (*first revision*).

IS : 725-1961 Copper wire nails (*revised*).

**0.4** In the preparation of this standard, assistance has been derived from Interim Federal Specification No. FF-N-0095 ( Navy-S&A ) 'Packing of nails', issued by the Federal Supply Services, Washington, D.C.

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#### 1. SCOPE

**1.1** This code of practice lays down the requirements for packing nails for transportation, handling and storage.

#### 2. CLASSIFICATION OF PACKAGING

**2.0** The nails shall be classified as under for their packing requirements.

**2.1 Class A** — For immediate use, that is, if issued from stock or from covered storage to domestic receiving activity not involving sea transportation.

**2.2 Class B** — For indefinite storage or overseas transport.

### **3. GENERAL**

**3.1** Nails shall be marketed in a packed condition.

**3.2** For identification, the package shall always carry suitable labels.

**3.3** In a single packing unit, nails of the same designation only shall be packed.

**3.4** Collective packages may be used for a number of unit packs in a common bigger container, provided the separately packed nails can be identified easily by means of their labels.

**3.5** The external dimensions of the unit container shall conform to IS : 8470-1977\* to permit unitization for easy handling in transportation.

### **4. PACKAGING**

#### **4.1 Class A**

**4.1.1** Generally the nails are supplied in fibreboard boxes of sizes defined by the numbers required per pack. The fibreboard boxes shall conform to IS : 2771 ( Part II )-1975†.

**4.1.2** Inside the fibreboard boxes the requisite number of nails shall be packed in a plastic bag made of LDPE conforming to IS : 2508-1977‡ or suitable laminates like kraft/poly bitumenised kraft.

**4.1.3** Bulk container shall be such that the gross mass does not exceed 50 kg.

#### **4.2 Class B**

**4.2.1** For Class B usage the nails shall be packed in fibreboard boxes, steel drums or wooden boxes.

**4.2.1.1 Fibreboard box** — When fibreboard boxes are used these shall conform to IS : 2771 ( Part I )-1977§ or IS : 2771 ( Part II )-1975†. The gross mass of the boxes, when packed, shall not exceed 50 kg. The boxes shall be lined inside with waterproofing medium like bitumen laminated on kraft paper or polyethylene liner. The container shall be strapped with flat steel straps or round wire straps. The straps shall be centered on the container and placed perpendicular to each other so that each strap encircles the top, bottom, sides or ends of the container.

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\*Dimensions of rigid rectangular transport packages.

†Fibreboard boxes: Part II Solid fibreboard boxes (*first revision*).

‡Low density polyethylene films (*first revision*).

§Fibreboard boxes: Part I Corrugated fibreboard boxes (*first revision*).



**4.2.1.2 Steel drum** — When steel drums are used, these shall conform to IS : 2552-1979\* and shall be fabricated from 0.50 mm steel for the body and 0.63 mm steel for ends ( top and bottom ) ( Grade B<sub>2</sub> of IS : 2552-1979\* ).

**4.2.1.3** The top edge shall be curled outward and shall present a smooth round surface for contact with full removable cover with or without gasket.

**4.2.1.4 Wooden boxes** — When wooden boxes are used, these shall conform to IS : 1503-1979†.

## 5. MARKING

**5.1** The container shall be marked with the following information:

- a) Designation of the nails;
- b) Name or trade-mark of the supplier;
- c) Nominal number of nails in the box; and
- d) Handling instructions, if any.

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\*Steel drums ( galvanized and ungalvanized ) ( *second revision* ).

†Wooden packing cases ( *second revision* ).

# INTERNATIONAL SYSTEM OF UNITS ( SI UNITS )

## Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

## Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

## Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	1 N = 1 kg.m/s <sup>2</sup>
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m <sup>2</sup>
Frequency	hertz	Hz	1 Hz = 1 c/s (s <sup>-1</sup> )
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W A
Pressure, stress	pascal	Pa	1 Pa = 1 N/m <sup>2</sup>